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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,530	06/14/2002	Tomoe Kawane	020274	3022
23850	7590	12/20/2005	EXAMINER	
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP 1725 K STREET, NW SUITE 1000 WASHINGTON, DC 20006			ARMSTRONG, ANGELA A	
			ART UNIT	PAPER NUMBER
			2654	

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/069,530		KAWANE ET AL.	
	Examiner		Art Unit	
	Angela A. Armstrong		2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7-11,13-15 and 17-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7-11,13-15 and 17-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1, 4, 5-7, 11, 14-17, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2500761 in view of JP 60-16200.
2. Regarding claims 1, 11, and 21, the partial translation of JP 2500761 discloses a speech recognition device (20), comprising: an input unit (11) for inputting a digital sound signal (page 1, lines 12-16); a sound level estimator for estimating the sound level of a sound period based on the digital sound signal in a part of said sound period input by said input unit, and which thereby detects the starting point of the sound signal (page 1, lines 15-16); sound level adjuster that adjusts (19) the level of the digital sound signal in said sound period input by said input unit based on the sound level estimator and a preset target level (page 1, line 17 to page 2, line 10; page 2, line 14 to page 3, line 9; page 3, line 13 to page 6, line 21); and speech recognition unit (20) that performs speech recognition based on the digital sound signal adjusted by said sound level adjuster (page 3, line 13 to page 6, line 21). JP 2500761 discloses a sound level estimator that estimates the sound level of said sound period based on the digital sound signal in a prescribed time period at the beginning of said sound period input by said input means (page 3, line 13 to page 6, line 21).

JP 2500761 (partial translation) does not teach the system utilizes a delay circuit or storing circuit. However, JP60-16200 (partial translation) provides for a voice input is delayed, and thereby necessarily detected from some starting point, in response to the output timing of a

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gain control signal, for the purpose of achieving high fidelity, a high recognition rate and reliable automatic gain control. It would have been obvious to one of ordinary skill at the time of the invention to modify the JP 2500761 recognition system to provide for a delay or storing circuit for delaying a sound signal in response to a gain signal for the purpose of achieving reliable automatic gain control, as suggested by JP60-16200.

3. Regarding claims 4 and 14, JP 2500761 discloses the sound level adjusting means amplifies or attenuates the level of the digital sound signal in said sound period input by said input means by an amplification factor determined by the ratio between said preset target level and the sound level estimated by said sound level estimation means (page 3, line 13 to page 6, line 21).

4. Regarding claims 5 and 7 and 15 and 17, JP 2500761 (partial translation) does not teach the system utilizes a delay circuit or storing circuit. However, JP60-16200 (partial translation) provides for a voice input is delayed in response to the output timing of a gain control signal, for the purpose of achieving high fidelity, a high recognition rate and reliable automatic gain control. It would have been obvious to one of ordinary skill at the time of the invention to modify the JP 2500761 recognition system to provide for a delay or storing circuit for delaying a sound signal in response to a gain signal for the purpose of achieving reliable automatic gain control, as suggested by JP60-16200.

5. Claims 3, 10, 13, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2500761 in view of JP60-16200, and further in view of JP 126093 (Okamoto).

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6. Regarding claims 3, 10, 13, and 20, JP 2500761 (partial translation) does not teach a processor to inactivate the sound level adjusting when the sound level is within a predetermined range. However, JP 126093 (partial translation) determines if a sound signal level is within a prescribed range to obtain a high recognition rate. It would have been obvious to one of ordinary skill at the time of the invention to modify the system providing in JP2500761 to determine if a sound signal level is within a prescribed range, as suggested by Okamoto, for the purpose of obtaining a high recognition rate and thereby improve system performance, as suggested by Okamoto (see Abstract).

7. Claims 8-9 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2500761 in view of JP60-16200, and further in view of JP2975808 (Koichi).

8. Regarding claims 8-9 and 18-19, JP 2975808 (partial translation) does not teach the system utilizes a speech recognition feedback to the adjusting circuit. However, JP2975808 (partial translation) to Koichi provides for a learning effect of the system such that the recognition result is feedback into the system for the purpose of improving the precision of the recognizer. It would have been obvious to one of ordinary skill at the time of the invention to modify the JP2500761 recognition system to provide a recognition result feedback path, as suggested by Koichi, for the purpose of improving the precision and performance of the recognizer, as also suggested by Koichi.

Response to Arguments

9. Applicant's arguments with respect to claims 1, 11, and 21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

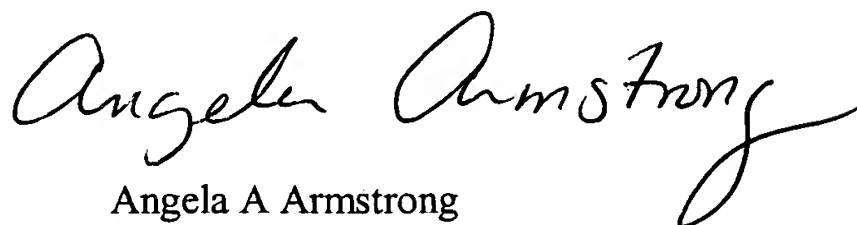
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 571-272-7598. The examiner can normally be reached on Monday-Thursday 11:30-8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Angela A Armstrong
Primary Examiner
Art Unit 2654

AAA
December 12, 2005